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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,250	02/28/2000	Ho Young Choi	YHK-039	9403

7590 04/01/2002
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EXAMINER

CHANG, AUDREY Y

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 04/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/514,250	Applicant(s) CHOI ET AL.	
	Examiner Audrey Y. Chang	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 15-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 44-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Remark

- This Office Action is in response to applicant's amendment filed on February 4, 2002, which has been entered as paper number 15.
- By this amendment, the applicant has amended claims 1-3, 8-10 and 16 and has newly added claims 38-53.
- The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 38-53 been renumbered 41-56.

- Claims 15-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11.
- Claims 41-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11.
- Claims 1-14, and 44-56 remain pending in this application.
- The rejections to claims 2-3 and 9-10 under 35 USC 112, second paragraph, set forth in the previous Office Action dated October 12, 2001 are withdrawn in response to applicant's amendment.

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Response to Amendment

1. The amendment filed on February 4, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the newly added claims 45 and 50 recite the lens with aspherical surface is made of plastic material that is not supported by the specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 45 and 50-51 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.** The reason based on newly added matter is stated in paragraph above. Claim 51 inherits the rejection from its based claim.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 47, 51, and 53-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

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The phrase "for the majority of refractive power" recited in claims 47, 51 and 53 is indefinite it is not clear what does it mean. The scope of the claims therefore is unclear. Claim 54 inherits the rejection from its based claim.

Double Patenting

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. Applicant is advised that should claims 2-3 and 9-10 be found allowable, claims 6-7 and 13-14 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1, 3-4, 7, 8, 10-11 and 14 and newly added claims 46-48, 52-54 and 55-56 are rejected under 35 U.S.C. 102(b) as being anticipated by the patent issued to Tezuka et al.**

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The reasons for rejection based on the teachings of Tezuka et al are set forth in the previous Office Action dated October 12, 2001.

Claims 1 and 8 have been amended to include the feature having at least one of the plurality of lenses comprises an aspherical surface. Tezuka et al teaches that the Fresnel lens may be made to have *aspherical* surface to correct aberration, (please see column 4, lines 33-35 and column 7, lines 46-55). With regard to newly added claims 46 and 52, the aspherical surface has the implicit function of correcting *spherical aberrations*. With regard to newly added claims 47 and 53, Tezuka et al teaches that the lenses are made of *quartz* material which is a known *glass material*, (please see column 1). The refractive power is implicitly inherent by the glass material and lenses design. With regard to newly added claims 48 and 54, Tezuka et al teaches that the projection lens including the Fresnel lens has the function of correcting *astigmatism* which therefore including the correction of *field of curvature*, (please see column 4 and Figure 4).

With regard to newly added claims 55-56, Tezuka et al teaches a projection lens having a plurality of refractive lenses including a *Fresnel lens* (9) that may be formed on an *aspherical* surface, (please see Figure 3). The Fresnel lens has the function of correcting both *on-axis and off-axis aberrations* including *chromatic* aberration, (please see column 4, lines 25-37).

This reference has therefore anticipated claims.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 2, 6, 9, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Tezuka et al in view of the patent issued to Chen et al.

The reasons for rejection are set forth in the previous Office Action dated October 12, 2001.

12. Claims 5, 12 and newly added claims 45, and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Tezuka et al.

The reasons for rejection (for claims 5 and 12) are set forth in the previous Office Action dated October 12, 2001.

The newly added claims 45 and 50 recite that the lens with aspherical surface is made of plastic material. The feature is rejected under 35 USC 112, first paragraph, as newly added matter. Tezuka et al reference does not teach such explicitly. However plastic material is a well-known material in the art for making lenses. It is also very well known in the art that different kind of material is suited for different wavelength band of interest. It is therefore an obvious matter of design choice to one skilled in the art to make the lens with plastic material for the benefit of making a projection lens having particular characteristics. For it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended used as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With regard to claim 51, Tezuka et al teaches that the lenses are made of quartz material which is a known glass material, (please see column 1). The refractive power is implicitly inherent by the glass material and lenses design.

13. Claims 44 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Tezuka et al in view of the patent issued to Nakagiri (PN. 5,555,479).

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The projection lens with a Fresnel lens having aspherical surface taught by Tezuka et al as described in the previous Office Action dated October 12, 2001 and paragraph above has met all the limitations of the claims. Tezuka et al does not teach explicitly that the projection lens system has a spherical lens surface. However having spherical lenses within projection lens system is very well known in the art as taught by Nakagiri, (please see column 4 lines 38-42). It would then have been obvious to one skilled in the art to include lens having spherical surface for the benefit of designing projection lens with desired characteristics.

Response to Arguments

14. Applicant's arguments filed on February 4, 2002 have been fully considered but they are not persuasive. The newly mended claims and newly added claims have been fully considered and they are rejected for the reasons stated above.

15. Applicant's arguments are based on the newly added features and newly added claims that have been fully addressed for the reasons stated above.

16. The restriction and election are **made final** in the previous Office Action dated October 12, 2001. The searches and considerations for species II and III are not necessary for species I. The searches for different species are therefore burdensome.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing

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date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 703-305-6208. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703-308-1637. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Audrey Y. Chang
Primary Examiner
Art Unit 2872



A. Chang, Ph.D.
March 28, 2002